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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/010,800   | 12/07/2001  | Jae-Duck Lee         | 678-706 (P9742)     | 7307             |
| 28249  | 7590        | 07/06/2006           |                     | EXAMINER         |
| DILWORTH & BARRESE, LLP<br>333 EARLE OVINGTON BLVD.<br>UNIONDALE, NY 11553 |             |                      | DOAN, KIET M        |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2617                |                  |

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                       |                  |  |
|------------------------------|-----------------------|------------------|--|
| <b>Office Action Summary</b> | Application No.       | Applicant(s)     |  |
|                              | 10/010,800            | LEE, JAE-DUCK    |  |
|                              | Examiner<br>Kiet Doan | Art Unit<br>2617 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 May 2006.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-7 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/03/2006 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 05/03/2006 have been fully considered but they are not persuasive.

In response to applicant argument reference, not only is there no any teaching of "searching FAs of adjacent stations excluding a base station currently engaged in communication with said mobile communication terminal".

Examiner respectfully disagrees, in Soliman reference teaches "searching FAs of adjacent stations excluding a base station currently engaged in communication with said mobile communication terminal" (C4, L23-67, C5, L1-18, Fig.1, Illustrate target BST No.20 as read on adjacent stations and the source BST is the one currently engaged in communication with said mobile communication terminal wherein source BST will be excluding when mobile station No.26 perform hand-off to target BST).

Therefore, examiner interpreted “searching FAs of adjacent stations excluding a base station currently engaged in communication with said mobile communication terminal” as broadest reasonable interpretation and it is proper.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

**Claims 1-7** are rejected under 35 U.S.C. 102(e) as being anticipated by Soliman (Patent No. 6,321,090).

Consider **claims 1, 4 and 7**, Soliman teaches a method for performing a hard hand-off in a cellular mobile communication system, the method comprising the steps of:

setting an area of services covered with a frequency assignment (FA) of a plurality of FAs of a base station currently engaged in communication with mobile communication terminal, to be a boundary cell, the FA is only included in FAs of the base station and not in adjacent stations of the base station:

entering into the boundary cell by the mobile communication terminal during communication (C7, L11-67, C8, L1-23, teach performing a hard hand-off and Fig.3, Illustrate the area of service wherein frequency 1 currently engaged in communication

with mobile No.26 and entering into the boundary cell from cell 72 to cell 74 across boundary 98); and

searching FAs of only adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal so as to determine a target FA, with which the mobile communication terminal is to perform the hard hand-off (C4, L23-67, C5, L1-18, Fig.1, Illustrate target BST No.20 as read on adjacent stations and the source BST is the one currently engaged in communication with said mobile communication terminal wherein source BST will be excluding when mobile station No.26 perform hand-off to target BST).

Consider **claims 2 and 5**, Soliman teaches the method of claim 1, wherein the target FA is determined by the mobile communication terminal through searching common FAs of adjacent stations to perform the hard hand-off therewith (C7, L51-67, C8, L1-23, Fig.2, No.48 teach selector tracking mobile terminal means as searching common FAs of adjacent stations as f1/f2 to perform the hard hand-off therewith).

Consider **claims 3 and 6**, Soliman teaches the method of claim 2, wherein determination of the target FA includes a step of recognizing that the mobile communication terminal is currently engaged in communication in the boundary cell (C3, L5-22, C4, L31-40, teach tracking signal when mobile within the determined are which means as determination of the target FA includes a step of recognizing mobile currently engaged in communication in the boundary cell), and commanding the mobile

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communication terminal to search FAs of the adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal by means of a base station controller (BSC), which controls the hand-off of the mobile communication terminal (C4, L23-55, C7, L40-67, C8, L1-31, Fig.1, No.12, Illustrate MSC which contain base station controller for controls the hand-off of the mobile communication terminal).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Czaja et al. (Patent No. 7,023,822) teach limitation of claim 1-7 (C3, L16-63, C4, L1-39, Fig.1 and Fig.3).
- 2.Otsuka et al. (Patent No. 6,741,859) teach limitation of claim 1-7 (Abstract, C4, L45-67, C5, L1-55, C11, L23-67, C12-18).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan  
Patent Examiner



GEORGE ENG  
SUPERVISORY PATENT EXAMINER